

REMARKS

Receipt of the Office Action mailed May 30, 2003 is acknowledged. Claims 1-26 are pending in the application with claims 1, 10, 17, and 19 being independent claims. Claims 1, 10, 17 and 19 are amended hereby to particularly recite that the link active schedule includes a communication timing schedule and to particularly recite that the master and the backup link active schedulers control communications over the databus using the link active schedule.

This amendment is accompanied by a request for a two month extension of time and the requisite fee therefore, thereby extending the response date to October 30, 2003. As a result this amendment is believed to be timely filed.

Applicants respectfully traverse the rejection of claims 1-26 as obvious over what the Examiner has called the Applicant Admitted Prior Art (hereinafter "AAPA") in view of Pentikäinen, US 6,445,905, or as obvious over Burns et al., WO 98/14853 (hereinafter "Burns") in view of Pentikäinen, either alone or in combination with Chrabaszcz et al., US 6,263,387 (hereinafter "Chrabaszcz") or Shapiro et al., US 6,230,286 (hereinafter "Shapiro"). Reconsideration and withdrawal of the rejections in view of the amendments made to the claims and the remarks provided below are respectfully requested.

Each of claims 1-26 (the pending claims) recites an apparatus or a method for use in a process control system having a controller for providing process control signals, a master link active scheduler (LAS), which operates to control the communications on a databus according to a link active schedule (including a communication timing schedule), and a backup LAS, the apparatus and method providing a new link active schedule to the backup LAS by automatically sending the new link active schedule from the master LAS to the backup LAS via the databus upon receipt of the new link active schedule by the master LAS. As indicated in the application as filed, this system and method assures that, when an operator sends a new link active schedule, including a new communication timing schedule, to the master LAS, the backup LAS is automatically updated with the new link active schedule so that the backup LAS will operate using the same link active schedule as the master LAS should the backup LAS need to take over controlling communications on the bus.

None of the cited art discloses or suggests a system or a method for use in a process control system that automatically transmits a link active schedule (or any type of

communication schedule for that matter) from a master bus communication control device (e.g., a master LAS) to a backup bus communication control device (e.g., a backup LAS) via communications over the bus that the new link active schedule is to control, as recited by the pending claims. Likewise, none of the cited art discloses or suggests sending bus scheduling control data over a bus in which a controller provides control signals, as indicated in the pending claims.

While the AAPA discloses the use of a master LAS and a backup LAS, as noted by the Examiner, the AAPA does not disclose or suggest automatically transmitting a link active schedule (or any other type of information) from a master LAS over a databus to a backup LAS upon receipt of the link active schedule (or other data) in the master LAS. Instead, as described in the background section of the application, the AAPA relies on a user to manually send the new link active schedule to each of the backup LAS devices and, if the user forgets to do so, the system may fail upon switch over to the backup LAS because the backup LAS will not be using the same communication timing schedule to control communications on the bus as was being used by the master LAS. Additionally, the AAPA system does not disclose or suggest a system in which a controller sends control signals over a bus and a link active scheduler sends link active schedule information over the same bus, which, as the Examiner may recall, is the distinction argued in the amendment made in the RCE, which distinction overcame the art previously cited by the examiner.

In a similar manner, Burns fails to disclose or suggest a system that provides a link active schedule from a master LAS to a backup LAS in any manner, much less doing so automatically. As with the AAPA, the Burns system relies on a user to send the link active schedule directly to each of the master LAS and the backup LAS devices. Burns fails to provide any suggestion or motivation that it might be possible or even desirable to send any information from the master LAS to the backup LAS, much less to send a link active schedule automatically upon receipt of that schedule at the master LAS.

While Pentikäinen discloses a method of backing up data that is stored in a master exchange database using a backup exchange database, Pentikäinen does not, in any manner, disclose or suggest that the data being exchanged can or should be a communication timing schedule (i.e., a link active schedule) that is used to control communications on a bus of any kind, much less the communications on the very bus over which the data is being sent. Instead, the data being sent from the master exchange database to the backup exchange database of Pentikäinen is either subscriber information and/or group information (column 3,

lines 4-7) including, inter alia, subscriber identity information, subscriber location information, subscriber services information, and group identity information. This data has nothing to do with bus schedulers. In fact, the Pentikäinen system does not use or relate to a bus scheduler system of any kind, much less one associated with a process control system. Because Pentikäinen is not concerned with bus communication schedulers of any kind, it cannot provide any motivation or suggestion to send a communication timing schedule (i.e., a link active schedule) from one bus communication control device (a master link active scheduler) to another bus communication control device (a backup link active scheduler). In other words, the Pentikäinen disclosure of storing data in a backup exchange to enable a user to obtain that data should the data become corrupted in the master exchange fails to provide any motivation for sending a link active schedule from a master communication scheduling device to a backup communication scheduling device to enable the backup communication scheduling device to operate properly to enable communications on a bus should the master communication scheduling device fail.

Put another way, the master exchange database and the backup exchange database of Pentikäinen are not analogous to the master link active scheduler and the backup link active scheduler recited by the claims 1-26 because the purpose of these two types of devices is completely different. In particular, the purpose of the master exchange database and the backup exchange database of Pentikäinen is to store data for retrieval or use by a user. On the other hand, the purpose of the master LAS and the backup LAS of the claimed system and method is to control communications over the bus using a link active schedule. As a result, the disclosure of Pentikäinen to send data from the master exchange to the backup exchange does not provide any disclosure of or any motivation for sending a link active schedule between two bus controller devices.¹

¹ The system and method of claims 1-26 do not send the link active schedule from a master LAS to a backup LAS to enable that link active schedule to be accessed from the backup LAS but, instead, send the link active schedule to assure that the backup LAS is able to operate properly to enable communications on the bus should the master LAS fail. The data sent between the master exchange and the backup exchange of Pentikäinen, on the other hand, has nothing to do with the operation of the backup device or of enabling communications on a bus should the master exchange fail. In fact, the backup exchange of Pentikäinen will operate properly regardless of whether it receives updated data from the master exchange or not and, furthermore, bus communications will still take place if the master exchange fails because neither the master exchange nor the backup exchange controls bus communications.

Still further, Pentikäinen does not disclose or suggest a communication system of any kind for use with a process controller or in a process control system, as indicated in each of the pending claims. Because Pentikäinen is not concerned with and is not directed to a process control system of any kind, it does not and cannot provide any suggestion or motivation for providing communications in a process control system having both a controller and multiple link active schedulers, as is recited by each of the pending claims.

Likewise, both Chrabaszcz and Shapiro fail to disclose or suggest a system that sends a communication schedule from one bus communication control device to another bus communication control device, nor has the examiner cited this art for such a proposition.

It is clear that the prior art must make a suggestion of or provide an incentive for a claimed combination of elements to establish a *prima facie* of obviousness. See, *In re Oetiker*, 24 U.S.P.Q.2d 1443, 1446 (Fed. Cir. 1992); *Ex parte Clapp*, 227 U.S.P.Q. 972, 973 (Bd. Pat. App. 1985). This principle holds true even if the applied art could be modified to produce the invention recited by the pending claims. See, *In re Mills*, 16 U.S.P.Q.2d 1430, 1432 (Fed. Cir. 1990); *In re Gordon*, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984) ("The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.") Because none of AAPA, Burns, Pentikäinen, Chrabaszcz or Shapiro discloses or in any manner suggests the desirability of automatically providing a bus communication timing schedule (i.e., a link active schedule) from a master bus communication control device to a backup bus communication control device, much less one that does so upon receipt of the link active schedule at the master bus communication control device, it follows that no combination of this art renders any of the pending claims obvious.

For the foregoing reasons, reconsideration and withdrawal of the rejections of the claims and allowance thereof are respectfully requested. Should the examiner wish to discuss the foregoing, or any matter of form, in an effort to advance this application towards allowance, the examiner is urged to telephone the undersigned at the indicated number.

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

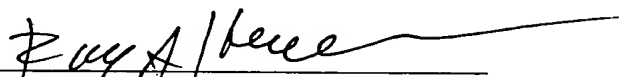
To assure fulfillment of their duty of disclosure under 37 C.F.R. § 1.98, Applicants submit herewith a Form PTO-1449 citing a United Kingdom (GB) Examination Report issued in a corresponding foreign application along with a copy of that Examination Report. While this Examination Report is not prior art in and of itself, it is submitted for the

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Examiner's interest. The art cited in the Examination Report has already been brought to the Examiner's attention in this application.

Respectfully submitted,

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